late Todd L. Moise, where the writers had the great pleasure of serving as invited guests and guides aboard his luxuriously equipped motor-sailer *Escape*, that our measurements agreed almost to the fathom with those indicated by an elaborate electropic device.

In conclusion, certainly no discussion of dredging in the Keys area would be complete without some mention of the limitations imposed so frequently by weather. Although the region affords delightful cruising for small boats and yachts, the open waters of the Gulf Stream rapidly become guite choppy in anything more than a gentle to moderate wind. Unfortunately, dredging from a small boat is not only extremely difficult, but hazardous as well, unless the seas are reasonably calm. Our practice of organizing cruises to the Keys to last something over a month, usually in June or July, when light winds might reasonably be anticipated, worked out quite well, but even so, we vividly recall one period of a full ten days during which it was too rough to attempt a single haul with the dredge. The pleasures and thrills of deep-sea dredging far outweigh the disappointments however, so once the material is brought home and mounted in the collection, perhaps the many difficulties encountered serve some useful purpose by causing us to appreciate even more those delightful treasures from so far beneath the sea.

NOTES ON LAND SNAILS OF GENERA SOLAROPSIS AND NENIA

BY HENRY A. PILSBRY

In the course of determining specimens of Solaropsis from Colombia, I had occasion to look over the species of Guiana. Finding nomenclatural irregularities, I was led to investigate the history of several species and to regulate their nomenclature.

SOLAROPSIS CICATRICATA Beck.

Helix pellis serpentis Chemnitz, 1795, Syst. Conch. Cab. 11: 268, pl. 208, figs. 2046, 2047.—Ferussac, 1822, Tableau Syst. Limaçons p. 39.—Pfeiffer, 1848, Monogr. Hel. Viv. 1: 371.—

Pilsbry, 1890, Man. Conch. 5: 178. [Not of Gmelin, 1791.]
S.[olaropsis] pellis serpentis [var.] b, cicatricata Beck, 1837. Index Molluscorum etc., p. 27.

Helix constrictor Hupé, 1853, Rev. et Mag. de Zool. (2 ser.), 5: p. 298.

This snail, characterized by the presence of two deep pits on the base, has long been known as *Helix* or *Solaropsis pellisserpentis* Chemnitz, 1795. Chemnitz's nomenclature was not consistently Linnean and is not now admitted, but having been accepted by Férussae and Dr. L. Pfeiffer this name passed into general use. Chemnitz had used the same name in 1786 for what is now regarded as another species, and this early use was the basis of *Helix pellisserpentis* Gmelin, 1791. Beck in 1837 recognized that two forms were involved, and introduced a varietal name, *cicatricata*, for Chemnitz's snail of 1795. A few years later H. Hupé saw that two species had passed under the same name and he named the pitted one *Helix constrictor*. Subsequent authors have followed Pfeiffer's incorrect usage.

This species is variable in size, diameter 41 to 53 mm. in ANSP. specimens, but I have seen little variation in the development of the deep pits at the periphery and base, though their position varies from directly opposite the aperture to a place somewhat more anterior.

Dr. F. Haas (Archiv für Molluskenkunde 78:152) has given Brazilian localities for this species and the next, under their Pfeifferian names. The type locality in Guiana was fully described by Chemnitz.

SOLAROPSIS UNDATA (Solander).

Helix undata Solander, 1786, Catalogue of the Portland Museum p. 177, no. 3802 [in part, referring to Lister, pl. 76, but exclusive of reference to Favanne].

Helix pellis serpentis Gmelin, 1791, Syst. Nat. p. 3620 [based chiefly upon Chemnitz, Conchylien Cabinet 9, figs. 1095, 1096].

Planorbis pellis-anguinea Röding, 1798, Museum Boltenianum, p. 72, no. 930 [based upon Chemnitz, Conchylien Cabinet 9, pl. 125, figs. 1095, 1096].

Martyn's nomenclature is not strictly Linnean so that his name is not valid as of 1786, and apparently must give way to *Helix undata* Solander, 1786.

¹ Solarium serpens Spix, 1827, is a different Brazilian Solaropsis.

Limax serpens Martyn, [1786?], Universal Conchologist 3, pl. 120.¹

Helix colubrina Perry, 1811 (Conchology pl. 15, fig. 4) was possibly a *Solaropsis undata*, but the figure is so preposterously bad that no certain identification is possible.

Solaropsis pellis-boae Hupé (Revue de Zoologie, 1853, p. 299), is a large species apparently closely similar to S. undata (Sol.), but I have not seen it. The locality, Mission de Sarayacu, Peru, is a hamlet in the state of Loreto, in the Rio Ucayali valley near the 75th meridian at about 6°58' S. lat.

S. undata (Sol.) has the subsutural and peripheral spot bands as in S. cicatricata, and dense, fine granulation, also as in that species; but the last whorl is regular, without pits. A specimen measures: alt. 35 mm.; diameter 54 mm., $5\frac{1}{2}$ whorls. Figures were given in Man. Conch. 5, pl. 58, figs. 38, 39, 40.

SOLAROPSIS ANOMALA, new species. Pl. 3, Figs. 1, 1a, 1b.

The rather solid shell is like S. undata in general figure having a dome-shaped spire and angular periphery, but it differs by having a modified last whorl, which on the side opposite the aperture is swollen below the suture, and in the peripheral region it is impressed and concave (fig. 1a). The base is broadly concave and coarsely striate radially around the umbilicus. The first $2\frac{1}{2}$ whorls are smooth, the following whorls are minutely, densely granulose on the upper surface, and the last $1\frac{1}{2}$ whorls have some coarse striae along lines of growth. The color pattern is like that of S. cicatricata and S. undata. On a whitish ground there is below the suture a broad band of crescentic to angular reddish brown spots alternating with white ones; at the periphery there is a band, half as wide, of more or less angular smaller spots. The white peristome is reflected throughout, and is dilated half over the umbilicus.

Height 32 mm., diameter 51 mm.; width of umbilicus behind lip 3.5 mm.; fully 6 whorls.

Guiana, exact locality unknown. Type 85147 ANSP., received from the Philadelphia Commercial Museum in 1903.

Besides S. cicatricata there are two other described species of Solaropsis having an indentation of the last whorl: S. monolacca (Pfr.) and S. vipera (Pfr.). S. monolacca, from Surinam, differs from our species in color pattern. It is described and figured as "braungelb, mit vielen rothbraunen, kaum welligen, Striemen gezeichnet," and without the subsutural and peripheral spot bands of *S. anomda* and others of the *cicatricata* group. The right lip margin is said to be "schmal ausgebreitet," not well reflexed as in our species. A comparison of the descriptions and figures shows various other differences.

S. vipera (Pfr.), described from a specimen from Brazil in the Cuming collection, is a smaller (37 mm. diameter) species with the typical *cicatricata* color pattern and only a quite small sulcus above the peripheral angle. The base is banded and less concave than in S. anomala.

A specimen before me, no. 202991 ANSP. agrees well with the account of S. vipera except for its larger size, 50.4 mm. diameter, and by having fewer basal spiral lines of dark dots. It is labelled "Brazil," but is from an old collection, origin not traceable.

Dr. Vernhout (1914, p. 7) listed under "S. pellisserpentis" a "specimen collected by Mr. Voltz . . . which has the peculiar pits of the left side but faintly indicated." I doubt whether this specimen is really referable to S. cicatricata, which has deep pits very constant in a large number seen in various collections. Dr. Vernhout's shell may possibly be the snail described above as S. anomala.

SOLAROPSIS UNDATA BROWNI, new subspecies.

The color pattern and minute surface sculpture are as in S. cicatricata and S. undata, but the shape is far more depressed than S. undata and the periphery is much more strongly though bluntly angular. It does not have the conspicuous pits of S. cicatricata. Height 29 mm., diameter 54.6 mm.; width of umbilicus behind lip 4 mm.; 5% whorls.

This race is known by the type, 1446 ANSP., a specimen from the A. D. Brown collection labelled "Peru." It was figured as a depressed form of "S. serpens Martyn" in the Manual of Conchology 5, pl. 59, figs. 50, 51, 52.

Various forms of the *S. gibboni* complex are equally depressed, but they do not have the minute granulation of this subspecies and others of its group.

SOLAROPSIS GIBBONI (Pfeiffer) Pl. 3, Figs. 2, 3.

A rather distinct form of this species was found in Colombia at Monteredondo, kilom. 73 on the road from Bogotá to Villavicencio, collected by F. Medem. Figures of an adult, faded specimen (fig. 2) and a young one taken alive (fig. 3) show the characters, solidity, shape and color pattern of this local form of the variable and widely distributed *S. gibboni*. Three specimens measure:

Height 31.5 mm., diameter 53.3 mm. Height 28 mm., diameter 55 mm. Height 27 mm., diameter 49.5 mm.

NENIA (ANDINIA) BARCROFTI, **new species**. Pl. 3, Figs. 4, 4a, 4b. The cylindric shell tapers in the upper half to a truncate summit closed by a strongly convex plug. Color white throughout or faint brown with a brown line at the suture. The whorls are only slightly convex, the last almost straight sided, shortly free in front. Sculpture of irregularly waved and frequently anastomosing riblets which have a slightly retractive axial direction. In adult shells the ventral side becomes worn smooth. On the latter part of the last whorl the riblets are strong and more regular, are often brown, and vary in number individually, as in figs. 4 and 4b.

The aperture is broadly ovate, narrowed at the upper left extremity, white within. The peristome is white, thin and broadly expanded. The superior lamella is marginal, high and thin, concave on the left side, continuous with the very short but high and arcuate spiral lamella; a short low branch at their junction. The inferior lamella is strong, convex. The subcolumellar lamella is deeply immersed and rather strongly developed within. The principal plica is short, lateral and dorsal, and is visible externally as a brown line. The lamella is weak and short, curving anteriorly from near the inner end of the principal plica.

The clausilium tapers distally to a blunt point on the columellar side of the oblique end, and posteriorly passes gradually into its filament.

Length 35.5 mm., diameter 7.3 mm.; 6 whorls remaining. Length 34.5 mm., diameter 7.5 mm.; $5\frac{1}{2}$ whorls remaining.

Colombia: Monteredondo, kilom. 73, road from Bogotá to Villavicencio, Type and two paratypes no. 203475 ANSP. This fine *Nenia* is named for Mr. Frederick J. Barcroft. Through his planning, introductions and material assistance during several years, considerable additions have been made to our series of South American mollusks.

Nenia karsteniana (Dohrn) and N. magistra (Sowerby) are large species from near Bogotá, both resembling N. barcrofti in being truncate and with the peristome expanded, but in both of them the sculpture is less coarse and irregular and it is far more oblique. In N. barcrofti the riblets are coarser and more interrupted, and they run nearly parallel to the axis of the shell. The short principal plica, visible externally through the shell, is unlike the karsteniana group.

PRUNUM ROSCIDUM IN NEW JERSEY

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Mrs. Clara Burke and other members of the Philadelphia Shell Club have been finding in New Jersey living examples of an attractive marginellid which superficially resembles *Prunum guttatum* Dillwyn. Closer investigation indicates that these specimens are *Prunum roscidum* (Redfield), a species which Conrad, Dall and others have erroneously synonymized under the Miocene species, *Prunum limatulum* Conrad. Below, we give a brief account of *P. roscidum* (see pl. 4 figs. 4, 4a).

PRUNUM ROSCIDUM (Redfield).

Marginella roscida Redfield 1860, Proc. Acad. Nat. Sei. Phila., vol. 12, p. 174 (Coast of South Carolina); 1868, Conrad (in part), Amer. Jour. Conch., vol. 4, p. 67; 1873, Tryon, Amer. Marine Conch., fig. 90.

Marginella limatula Conrad, Dall 1890, Trans. Wagner Free Inst. Sci., vol. 3, pt. 1, p. 49.

Marginella eulima Dall 1893, Trans. Wagner Free Inst. Sci., vol. 3, pt. 2, p. 225 (Pliocene of Shell Creek and the Caloosa-hatchie beds).

Marginella beali McGinty 1940, Nautilus, vol. 54, p. 63, pl. 3, figs. 10, 11 (Florida).

Adults 13 to 16 mm. in length, glossy, pale pinkish gray with numerous, small, irregular, opaque-white dots which rarely are coalesced below the suture to form short, irregular, axial streaks.